

Location

Watershed Geography

Both the North Wyaconda River and South Wyaconda River begin in Davis County, Iowa, just south of Bloomfield (Watershed Map). They flow in a southeasterly direction for approximately 45 miles before they join, forming the Wyaconda River. The river continues to flow in the same direction for 47 miles, where it enters the Mississippi River north of La Grange, Missouri at river mile 337. Seventy-three percent of the watershed is within Missouri, which drains portions of Clark, Lewis, and Scotland counties. The basin is only 5 to 8 miles wide along its 70 mile length. Major tributaries (3rd order or larger) to the Wyaconda River include the Little Wyaconda, Sugar Creek, Ramsey Branch, Little Sugar Creek, Crooked Creek, Hickory Creek, Derrahs Branch, and one unnamed tributary. Major tributaries to the North Wyaconda River include Billups Branch and three unnamed tributaries. The South Wyaconda River has three major tributaries including Allen Creek and two unnamed tributaries.

Watershed Area

The basin drains 458 square miles (293,120 acres), of which 336 square miles (215,040 acres) lie within Missouri. Both the North Wyaconda River and South Wyaconda River drain approximately 80 square miles each, composing 38% of the basin in total. The Wyaconda River is the only fifth order stream within the basin.

Stream Orders

Streams were identified on USGS 7.5-minute topographic maps and ordered according to Strahler (1957). There are 18 third-order and larger streams within the basin (Appendix A). The Wyaconda River is the largest (fifth-order) and longest (47 miles) stream within the basin. The North, South, Little Wyaconda and Sugar Creek are the only fourth-order streams within the basin. All remaining streams are third-order or smaller.

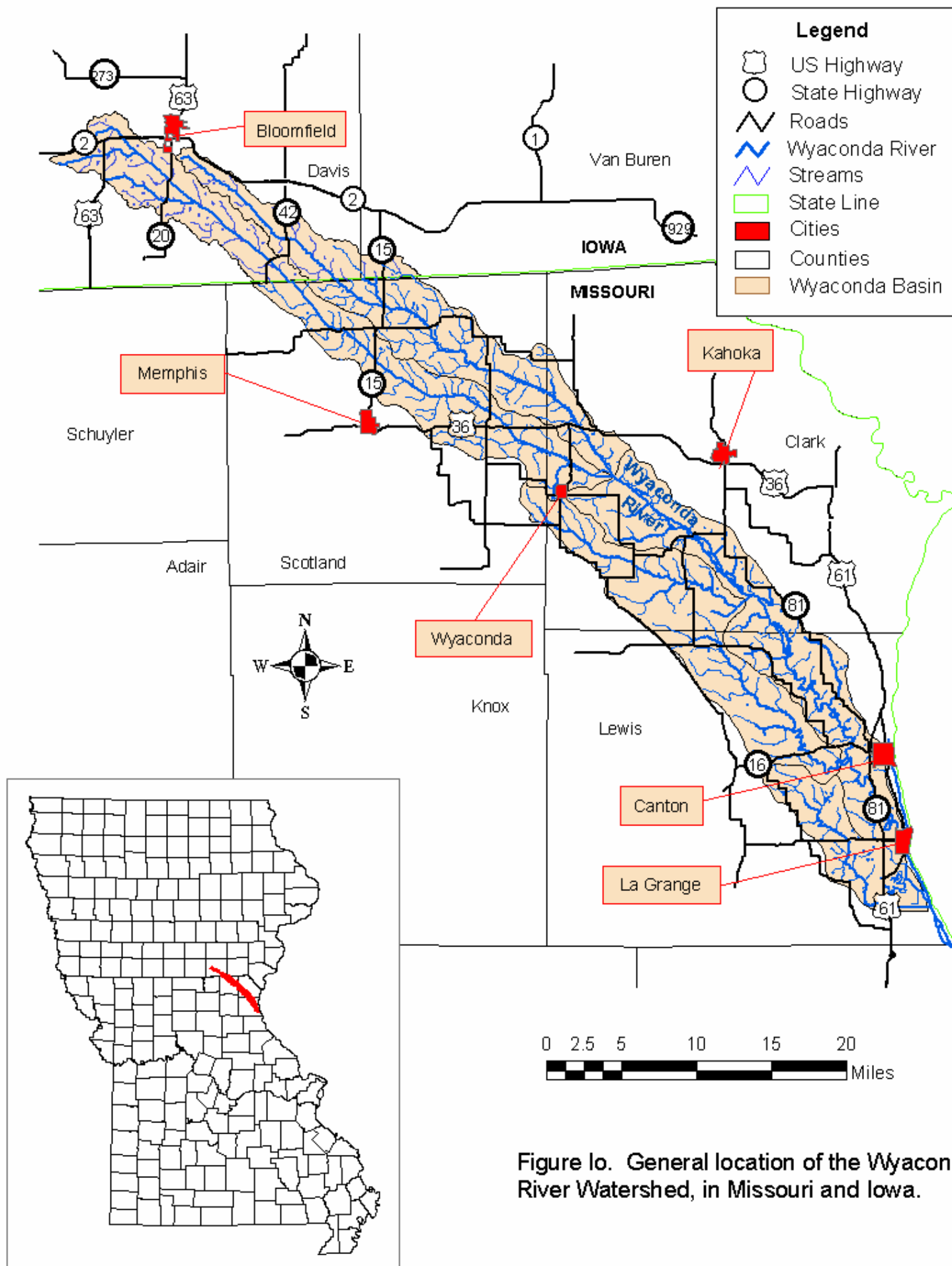


Figure 10. General location of the Wyaconda River Watershed, in Missouri and Iowa.

Appendix A. Wyaconda watershed stream miles, percent channelization, and gradient.

Stream Name	Location of Mouth Sec. Tnshp. Rnge.	Total Miles	% Channelized	Gradient (ft/mile) overall per order
Wyaconda River	30 61n 05w	49.2	1	2.7 all 5th order
North Wyaconda River	26 65n 09w	47.0	43	5.6 ⁴ /4.3 ³ /4.8
South Wyaconda River	26 65n 09w	47.4	86	6.9 ⁴ /4.7 ³ /10.0
Little Wyaconda River	05 63n 07w	25.0	0	6.6 ⁴ /5.0 ³ /6.2
Sugar Creek	32 62n 06w	26.4	0	7.8 ⁴ /5.4 ³ /7.5
Ramsey Branch	08 62n 07w	4.7	0	19.4 ³ /14.9
Little Sugar Creek	23 62n 07w	5.9	0	19.5 ³ /11.1
Unnamed tributary	23 61n 06w	3.8	0	38.4 ³ /33.3
Crooked Creek	07 62n 06w	7.1	0	17.0 ³ /12.0
Derrahs Branch	26 63n 07w	5.6	0	20.7 ³ /11.4
Hickory Creek	33 64n 08w	6.5	0	15.3 ³ /7.5
Unnamed tributary	26 65n 09w	4.9	0	23.6 ³ /15.6
Allen Branch	14 65n 10w	9.7	0	12.8 ³ /10.4
Unnamed tributary	18 66n 10w	3.4	0	26.2 ³ /14.0
Unnamed tributary	11 66n 11w	5.4	0	19.4 ³ /16.4
Unnamed tributary	28 66n 11w	2.9	0	36.6 ³ /22.7
Billups Branch	32 67n 11w	7.1	0	11.9 ³ /9.2
Unnamed tributary	19 68n 13w	8.4	0	15.5 ³ /12.5